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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.		
10/517,001	05/31/2005	Petri Ahonen	915-013.005 8749		
	7590 08/16/200 OLA VAN DER SLUX	EXAMINER			
ADOLPHSON,		NAM, HYUN			
BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224			ART UNIT	PAPER NUMBER	
MONROE, CT	06468		2184		
			MAIL DATE	DELIVERY MODE	
			08/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)				
	10/517,001	AHONEN, PETRI				
Office Action Summary	Examiner	Art Unit				
	Hyun Nam	2184				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
<ul> <li>1) Responsive to communication(s) filed on 31 M.</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ☐ Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-16 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner  10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction.  11) The oath or declaration is objected to by the Examiner	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119		·				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 12/2/2004	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te				

#### **DETAILED ACTION**

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

## Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

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(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

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- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

## Claim Objections

Claims 4 and 8 are objected to because of the following informalities:

In claim 4, line 4; "whereafter" should read --where after--.

In claim 8, line 3 "RAM memory" should read --Random Access Memory (RAM)--

# Invoked - 35 USC § 112 6th

Claims 9-16 have invoked 35 U.S.C. 112, sixth paragraph.

## Claim Rejections - 35 USC § 112 2<sup>nd</sup>

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the programming logics" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitations "the network unit's menu" in line 4 and "the mobile device's menu" in lines 4-5. There is insufficient antecedent basis for these limitations in the claim.

Claim 8 recites the limitations "the permanent memory" in lines 2-3 and "the RAM memory" in line 3. There is insufficient antecedent basis for these limitations in the claim.

Applicant is required to review the claim and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Toyoshima, (U.S. Publication 2002/0087759) hereinafter Toyoshima '759.

Referring to claim 1, Toyoshima '759 teaches, as claimed, a method for updating a firmware (new code, see Paragraph 17, Lines 16-17) of a mobile device (see Fig. 1, Wireless Module 200) belonging to a network (wireless or cellular network, see Fig. 1, Antenna 10), the method comprising:

transmitting update data (new code, see Paragraph 17, Lines 16-17) from a network (wireless or cellular network, see Fig. 1, Antenna 10) unit using a mobile device (403) (see Fig. 1, Wireless Module 200), to which there is connected a logic, external memory (peripheral device, see Paragraph 17, Line 17) unit,

storing the update data (new code) in the external memory unit (203, 303, 406) (stores new code in a peripheral device, see Paragraph 17, Lines 16-17) of the mobile device (Wireless Module 200), and

programming the stored update data (new code) in a permanent memory (see Fig. 1, NAND Flash 80) unit (204, 306, 408) of the mobile device (see Paragraph 16, Lines 12-24; Note it is programming that handles various formatting, converting, transferring, and storing of data), according to the programming logics (Wireless Module 200; Note, the module comprises programming logics) provided in the mobile device (Wireless Module 200).

As to claim 2, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of transmitting the update data (new code) from the network (wireless or cellular network) unit to the mobile device (Wireless Module 200) as a response to a certain function that triggers the transmission, said function being one of the following (Note, Toyoshima teaches at least one of the following alternative functions):

choosing from the network unit's menu (402) by a user,

choosing from the mobile device's menu (201) by a user,

an appearing of new update data to the network unit (see Fig. 3, Release Date 340; Note, when new version of update data is available then network send outs the data on the release date), or

an outdating (301) of the firmware of the mobile device.

As to claim 3, Toyoshima '759 teaches a method according to claim 1, wherein the logic, external memory (peripheral device) unit is connected to the mobile device (Wireless Module 200) by means of an external memory bus (105) (I/O interface, see Paragraph 15, Lines 14-15).

As to claim 4. Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of transmitting the update data (new code) by the mobile device (403) (Wireless Module 200), where the update data (new code) is converted to be compatible (see Paragraph 17, Lines 14-16; Note, wireless signal converted to digital format using given protocol) with the memory (peripheral device) unit and with the memory bus (405) (I/O interface, see Paragraph 15, Lines 14-15) to be connected thereto, where after the converted update data (new code) is transmitted to the external memory (peripheral device) unit along the memory bus (406) (I/O interface). As to claim 5, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of transmitting the update data (new code) by a mobile device (Wireless Module 200), through which the update data (new code) is directly transmitted

further to the external memory bus (I/O interface, see Paragraph 15, Lines 14-15) of the mobile device (Wireless Module 200) along a memory bus (203) (internal interface).

As to claim 6, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of programming the update data (new code) stored in the external memory (peripheral device) unit in the mobile device (Wireless Module 200). when the mobile device (Wireless Module 200) is switched on for the next time (304. 307, 407, 409).

As to claim 7, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of copying the programming logics for programming the update data (new code) from an external memory (peripheral device) unit to the permanent memory (NAND Flash 80) unit of the mobile device (Wireless Module 200) prior to programming (see Paragraph 18, Lines 14-15) the update data (305) (new code).

As to claim 8, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of storing the programming logics (fail-safe code, see Paragraph 18, Lines 3-6) for updating the update data (new code) from the permanent memory (NAND Flash 80) of the mobile device (Wireless Module 200) to the RAM memory (DRAM 90) of the mobile device (Wireless Module 200) prior to programming (see Paragraph 18, Lines 14-15) the update data (new code).

Referring to claim 9, Toyoshima '759 teaches, as claimed, an arrangement (see Fig. 1, Wireless Module 200) for updating a firmware (new code, see Paragraph 17, Lines 16-17) of a mobile device (see Fig. 1, Wireless Module 200) belonging to a network (wireless or cellular network, see Fig. 1, Antenna 10), the arrangement (Wireless Module 200) including

an external memory (peripheral device, see Paragraph 17, Line 17) unit (106) for storing the update data (new code),

means for transmitting the update data (transmitted new code, see Paragraph 17, Lines 16-17) from a network (107) unit (wireless or cellular network, see Fig. 1, Antenna 10) to the external memory (peripheral device) unit (106) of the mobile device (Wireless Module 200),

means for storing the update data (new code) to the external memory (see Paragraph 17, Lines 16-17) unit (106) of the mobile device (Wireless Module 200), and

means for programming the stored update data (new code) to a permanent memory (see Fig. 1, NAND Flash 80) unit (102) of the mobile device (Wireless Module 200) by means of a programming driver (see Paragraph 16, Lines 12-24;

Note it is programming that handles various formatting, converting, transferring, and storing of data) provided in the mobile device (Wireless Module 200).

Referring to claim 14, Toyoshima '759 teaches, as claimed, a mobile device (101) (see Fig. 1, Wireless Module 200) belonging to a network (107) (wireless or cellular network, see Fig. 1, Antenna 10) and including a firmware (new code, see Paragraph 17, Lines 16-17) to be updated, the mobile device (Wireless Module 200) comprising:

a connection interface (105) (I/O interface, see Paragraph 15, Lines 14-15) for connecting the mobile device (Wireless Module 200) with the network (wireless or cellular network) and for transmitting an update data (new code, see Paragraph 17, Lines 16-17) from the network (wireless or cellular network) to the mobile device (Wireless Module 200),

a memory bus interface (I/O interface) for connecting the mobile device (Wireless Module 200) with an external memory (peripheral device, see Paragraph 17, Line 17) unit (106), and for transmitting the update data (new code) from the mobile phone (wireless telephone, see Paragraph 16, Lines 7-10) to the external memory (peripheral device) unit in order to store the update data (new code) to the external memory (peripheral device) unit, and

means for programming the stored update data (new code, see Fig. 1) to a permanent memory (see Fig. 1, DRAM 90) unit of the mobile device (Wireless Module 200) according to programming logics (microprocessor, memories, and user interface, see Fig. 1 Wireless Module 200) provided in the mobile device (Wireless Module 200).

As to claim 15, Toyoshima '759 teaches a mobile device according to claim 14, wherein the mobile device (Wireless Module 200) comprises a mobile phone (wireless telephone, see Paragraph 16, Lines 7-10).

Referring to claim 16, Toyoshima '759 teaches, as claimed, an external memory (peripheral device, see Paragraph 17, Line 17) unit, connectable to a mobile device (see Fig. 1, Wireless Module 200), for storing update data (new code, see Paragraph 17, Lines 16-17) of a firmware (Note, new codes are stored in hardware, a peripheral device) of the mobile device (Wireless Module 200), the external memory (DRAM 90) unit comprising:

a memory bus interface (I/O interface, see Paragraph 15, Lines 14-15) for connecting to the mobile device (Wireless Module 200)and for receiving the update data (new code) from a network unit through the mobile device (Wireless Module 200),

means for storing the update data (new code, see Fig. 2), and

means for providing the mobile device (Wireless Module 200) with the stored updating data (new code, see Fig. 2) in order to program the stored update data (new code) to a permanent memory (NAND Flash 80) unit of the mobile device (Wireless Module 200) according to programming logics (microprocessor, memories, and user interface, see Fig. 1 Wireless Module 200) of the mobile device (Wireless Module 200).

### Conclusion

The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure:

Brandes et al. (U.S. Publication 2002/0010786) discloses data transmitting apparatus and method that includes firmware updating; and

Doyle et al. (U.S. Publication Number 2002/0095587) discloses smart card with integrated biometric sensor.

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#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hyun Nam whose telephone number is (571) 270-1725. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SUPERVISORY PATENT EXAMINER